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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/606,284 | 06/25/2003 | Pauli Seppinen | 944-003.151-1 | 3300 |

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| EXAMINER | |
|---|---|
| YUN, EUGENE | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2618 | |

DATE MAILED: 09/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/606,284 | SEPPINEN ET AL. | |
| | Examiner | Art Unit | |
| | Eugene Yun | 2618 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *08 September 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 June 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Response to Amendment*

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bridgelall (US 6,717,516) in view of Hall et al. (US 2004/0203352).

Referring to Claim 1, Bridgelall teaches a transceiver for use in an electronic device wherein said transceiver adapts itself to operate as an RF tag reader 44 (fig. 2) or as a Bluetooth transceiver 42 (fig. 2) by changing its reception and transmission capabilities (see col. 5, lines 1-15).

Bridgelall does not teach a single antenna usable for said transceiver operating as said RF tag reader or said Bluetooth transceiver. Hall teaches a single antenna (see last 7 lines pf paragraph [0008]) usable for said transceiver operating as said RF tag reader or said Bluetooth transceiver (see paragraph [0025] and 4 and 5 of fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Hall to said device of Bridgelall in order to reduce the cost and hassle of carrying two separate devices.

Referring to Claim 2, Bridgelall also teaches said Bluetooth transceiver is useable as a transceiver for a 2.4 GHz ISM band RF tag reader system (see col. 5, lines 1-15).

Referring to Claim 3, Bridgelall also teaches an integrated circuit (see 58 in fig. 2).

Referring to Claim 4, Bridgelall also teaches a mobile terminal (fig. 1).

Referring to Claim 5, Bridgelall teaches a radio device having a radio receiver and a radio transmitter wherein operability of said device is in two modes (see col. 5, lines 1-15), a Bluetooth mode 42 (fig. 2) and an RF tag reader mode 44 (fig. 2), said radio receiver and said radio transmitter comprising a single transceiver that adapts itself to operate as a Bluetooth transceiver in said Bluetooth mode and an RF-tag reader in said RF tag reader mode by changing its reception and transmission capabilities (see col. 5, lines 1-15).

Bridgelall does not teach using a single antenna in an RF-tag reader mode or Bluetooth mode. Hall teaches using a single antenna (see last 7 lines of paragraph [0008]) in an RF-tag reader mode or Bluetooth mode (see paragraph [0025] and 4 and 5 of fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Hall to said device of Bridgelall in order to reduce the cost and hassle of carrying two separate devices.

Referring to Claim 6, Bridgelall also teaches said operability of said radio device in either mode is by using said radio receiver and said radio transmitter (see col. 5, lines 1-15).

Referring to Claim 7, Bridgelall also teaches said radio device incorporated in a device having additional device functionality (see col. 5, lines 29-46).

Referring to Claim 8, Bridgelall also teaches the device in which said radio device is incorporated comprising a mobile telephone (see 24, 26, and 28 in fig. 1).

Referring to Claim 9, Bridgelall also teaches said radio device installed in a mobile telephone (see 24, 26, and 28 in fig. 1).

Referring to Claim 10, Bridgelall teaches a radio device having a radio receiver 38 and 34 (fig. 2), a radio transmitter 38 and 34 (fig. 2), and a signal processor 50 (fig. 2), wherein the radio receiver is responsive to an incoming analog radio signal for providing a down converted and modulated signal to said signal processor, wherein the radio transmitter is responsive to an output signal from said signal processor for transmission as an outgoing analog radio signal (see col. 6, lines 37-60), said device further comprising control logic for controlling said radio device in two modes, a first mode for operating as a Bluetooth device and a second mode for operating as an RF tag reader (see col. 6, lines 60-67 and col. 7, lines 1-3), wherein said radio receiver and said radio transmitter comprises a single transceiver that adapts itself to operate as an RF tag reader or as a Bluetooth transceiver by changing its reception and transmission capabilities (see col. 5, lines 1-15).

Bridgelall does not teach a single antenna usable for said transceiver operating as said RF tag reader or said Bluetooth transceiver. Hall teaches a single antenna (see last 7 lines pf paragraph [0008]) usable for said transceiver operating as said RF tag reader or said Bluetooth transceiver (see paragraph [0025] and 4 and 5 of fig. 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Hall to said device of Bridgelall in order to reduce the cost and hassle of carrying two separate devices.

Referring to Claim 11, Bridgelall teaches control logic for controlling a radio device in two modes, a first mode for operating as a Bluetooth device 42 (fig. 2) and a second mode to operating as an RF tag reader 44 (fig. 2) wherein said radio device comprises a single transceiver that adapts itself to operate as said RF tag reader or as a Bluetooth transceiver by changing its reception and transmission capabilities (see col. 5, lines 1-15).

Bridgelall does not teach a single antenna usable for said transceiver operating as said RF tag reader or said Bluetooth transceiver. Hall teaches a single antenna (see last 7 lines pf paragraph [0008]) usable for said transceiver operating as said RF tag reader or said Bluetooth transceiver (see paragraph [0025] and 4 and 5 of fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Hall to said device of Bridgelall in order to reduce the cost and hassle of carrying two separate devices.

Referring to Claim 12, Bridgelall also teaches means for communicating with a radio access network over a radio interface (see 214 of fig. 4).

Referring to Claim 13, Bridgelall also teaches a signal processor 50 (fig. 2) and a mobile telephone transceiver 28 (fig. 1).

Referring to Claim 14, Bridgelall teaches a method comprising:

Switching a mode of a single transceiver able to operate as an RF tag reader 44 (fig. 2) in one mode and as a Bluetooth transceiver 42 (fig. 2) in another mode by changing reception and transmission capabilities of said single transceiver (see col. 5, lines 1-15).

Bridgelall does not teach a single antenna usable for said transceiver operating as said RF tag reader or said Bluetooth transceiver. Hall teaches a single antenna (see last 7 lines pf paragraph [0008]) usable for said transceiver operating as said RF tag reader or said Bluetooth transceiver (see paragraph [0025] and 4 and 5 of fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Hall to said device of Bridgelall in order to reduce the cost and hassle of carrying two separate devices.

Referring to Claim 15, Bridgelall also teaches said single transceiver is both for interrogating an RF tag and for participating in a Bluetooth piconet (see col. 5, lines 1-15).

Referring to Claim 16, Bridgelall also teaches a single transceiver and single antenna for use in a mobile telephone 28 (fig. 1) and operating a mobile telephone transceiver of said mobile telephone over a radio interface to a radio access network (see 214 of fig. 4).

### *Response to Arguments*

4. Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eugene Yun whose telephone number is (571) 272-7860. The examiner can normally be reached on 9:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on (571)272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Eugene Yun
Examiner
Art Unit 2618

EY

MATTHEW ANDERSON
SUPERVISORY PATENT EXAMINER